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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,347	03/06/2002	Steven Crockett	3178-Z	7048

7590 11/05/2004

Law Office of Jim Zegeer
Suite 108
801 North Pitt Street
Alexandria, VA 22314

EXAMINER

OMGBA, ESSAMA

ART UNIT	PAPER NUMBER
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3726

DATE MAILED: 11/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/091,347

Applicant(s)

CROCKETT, STEVEN

Examiner

Essama Omgba

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 7 and 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/18/02.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of the invention of specie A in the reply filed on July 7, 2004 is acknowledged.

Specification

2. The disclosure is objected to because of the following informalities: on page 8, line 8, reference numeral "20" should read --71--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 4-6 and 9-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites the limitation "the downstream ends" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the downstream end" and "the exit throat" in lines 11 and 12 respectively. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Srinath (US Patent 6,581,856) in view of Steptoe et al. (US Patent 3,459,847).

With regards to claim 1, Srinath discloses a fluidic oscillator device having a power nozzle for projecting a jet of fluid into an interaction region MC with an upstream end, opposing sidewalls, top and bottom walls, a pair of control ports CP1, CP2, the control ports juxtaposed to respective sides of the interaction region, the sidewalls diverging from the power nozzle, see column 1, lines 15-21 and 55-63 and figure 1. Although Srinath does not disclose the fluidic oscillator being molded as a core without seam lines, however it is known to integrally mold fluidic devices that were previously fabricated as separate pieces as attested by Steptoe et al., see column 2, lines 31-44. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have integrally molded the fluidic oscillator of Srinath, in light of the teachings of Steptoe et al., in order to improve on the accuracy of producing the devices. Applicant should also note that it would have been obvious to one of ordinary skill in the art to have integrally mold the fluidic oscillator of Srinath since it has been held that forming in one piece an article which has formerly been formed in two pieces

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and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

For claim 2, Applicant should note such fluidic oscillator is obvious in view of Srinath/Stephoe et al.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Srinath/Stephoe et al. as applied to claim 1 above, and further in view of Thurber, Jr. et al. (US Patent 6,575,386).

Srinath/Stephoe et al. discloses a method of molding a fluidic oscillator as shown above except for top and bottom inertance plates with different lengths of inertance loops to thereby provide oscillations with different operating frequencies. However such inertance plates are known as attested by Thurber, Jr. et al., see column 3, lines 4-6. therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have provided the fluidic oscillator of Srinath/Stephoe et al. with inertance plates having different lengths of inertance loops, in light of the teachings of Thurber, Jr. et al., in order to vary the frequency of the oscillations.

Allowable Subject Matter

8. Claims 4-6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

9. Claims 9-11 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.


Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Essama Omgba whose telephone number is (703) 305-2915. The examiner can normally be reached on M-F (10-7:30) First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (703) 308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Essama Omgba
Primary Examiner
Art Unit 3726

eo
October 30, 2004